

Stem cells can be harvested after death

05 July 2012 | News | By BioSpectrum Bureau

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Singapore: A research conducted by Fabrice Chretien of France's Pasteur Institute, has revealed that some stem cells can be revived to divide into new, functioning cells after laying dormant for more than two weeks in a dead person.

The research, which was published in Nature Communications, unlocks further knowledge about the versatility of these cells, touted as a future source to replenish damaged tissue.

The study pointed out that skeletal muscle stem cells can survive for 17 days in humans and 16 days in mice, post mortem well beyond the 1-2 days currently thought.

The stem cells retained their ability to differentiate into perfectly functioning muscle cells. This discovery could form the basis of a new source, and more importantly new methods of conservation, for stem cells used to treat a number of pathologies. The study found that to survive in adverse conditions, skeletal muscle stem cells lower their metabolism to enter a dormant state, using less energy.

The team then also looked at stem cells taken from bone marrow, where blood cells are produced. These remained viable for four days after death in lab mice and retained their ability to reconstitute tissue after a bone marrow transplant.